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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/871,309

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Hiroyuki Yamada

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1614

7590

06/17/2004

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EXAMINER

EASTHOM, KARL D

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/871,309

Applicant(s)

YAMADA ET AL.

Examiner

Karl D Easthom

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnston et al. Johnston disclose the claimed invention. Johnston discloses the claimed invention at Fig. 3, with the substrate 22, resistor 23, and electrodes 24. In claim 10, the side sections of Johnston, or part without the S shapes, are rectangular.

3. Claims 1, 6, 10-11, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Edwards, Jr. et al. Edwards discloses the claimed invention at Fig. 1, with the substrate 18, resistor 24, electrodes 22. For claim 6, the two rectangular sections are the first closest lines parallel to the electrodes at the end, and there is no more than one full S-shape between the two rectangular sections, although there are some other curved meander sections that make up less than an S. In claims 9-10, the side sections without the S shapes, are rectangular. In claim 13, no trimming groove is shown.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7, 9, 11, 13, and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. in view of Collins. Johnston discloses the claimed invention at Fig. 3, except the width shorter than the length of the substrate, with the

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substrate 22, resistor 23, and electrodes 24. Collins discloses at Fig. 3 a substrate having a shorter width than a length, a typical dimension for obtaining resistors of many different resistances in one process at cols. 4-5, so that it would have been obvious to form the standard chip, or to make a smaller chip where Johnson discloses a need to decrease the substrate size at col. 2, lines 50-65. For claim 7, printing is not disclosed, but Johnston discloses using any suitable manner at col. 3, lines 60-63, while Collins at cols. 1-2, and see col. 4, lines 23-35, discloses employing fine line patterns by printing to obtain high resistance values so that such a method would have been obvious. In claim 9, the side sections of Johnston, or part without the S shapes, are rectangular. In claim 13, there are no trimmed sections.

6. Claims 2-5, 8, 12, 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. in view of Collins, further in view of Solow. Johnston with Collins discloses the claimed invention as noted above, except the width of the side sections being wider. Solow discloses wider side sections 16 for the purpose of establishing integral terminal sections that can also be trimmed, see Fig. 1, so that would have been obvious to employ such sections. For claim 4, the sections appear to be twice as thick so that making that thickness relationship would have been obvious to ensure a good terminal section. For claims 3, 8 and 12, it would have been obvious in view of Solow to trim one or two portions of said side sections since one is shown explicitly trimmed for the purpose of obtaining the desired resistance, where one such trimming does not alter the resistance enough. For claim 14, no trimming grooves appear in said section.

7. Applicant's arguments filed 5/12/03 have been fully considered but they are moot or not persuasive. Applicant argues that Edwards shows more than a single S shaped

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section between the side sections. This is not correct if one picks the side sections as noted in the prior art Fig. 1, and then it is seen that there is only one full S section, although there are remaining curves that do not constitute a full S.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is (571) 272-1989. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Karl D Easthom  
Primary Examiner  
Art Unit 2832

KDE